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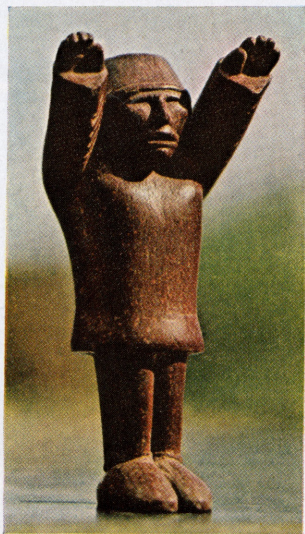
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SEE "SEARCH FOR THE GREAT APES" TUESDAY, JAN. 13, ON PBS TV

California's Parched Oasis

*The quiet, peaceful Owens Valley —
did it win or lose in its
water war with Los Angeles?*



JODI COBB (ABOVE) AND GALEN ROWELL

In everlasting prayer, a three-inch clay figure of a worshipful chief (above) by Paiute sculptor Raymond Stone seems to symbolize the reverence for water in the Owens Valley. Residents protested vehemently when the Los Angeles Aqueduct (right), completed in 1913, began bearing most of the Owens River to that distant city. A decade later, amid a drought, sections of the 222-mile conduit were sabotaged. Controversy continues, but many in the valley now prize a way of life preserved by the city's thirst.

IN THAT DEEP and disputed valley where greed for water has broken men and molded California, we were returning to the primeval. Squatting on wintry earth in the blackness of a Paiute Indian sweat lodge, we sipped mountain water and ladled it upon hot lava rocks. Steam hissed up, pungent with herbs, and seized at our lungs.

As the medicine man began to chant, the dark circle of Paiute worshipers erupted with soaring cries and guttural responses in a language almost lost. Wrapped in towels, we soon sat in the mud of our own sweat. Through us water was reentering the parched earth of the Owens Valley.

This was the sacred sweat ceremony, a tribute of oneness with earth and water and the Great Spirit, to whom the Indians were praying for respite from pain and disease. We heard reverent praise of those Paiute subdeities, the eagle and buffalo, and a smoking pipe was passed.

Just as it seemed we could endure the heat no longer, the Paiutes raised the flaps of our sweat lodge, a framework of saplings supporting a thick dome of tarpaulins. Blinking in the light, we sat and cooled.

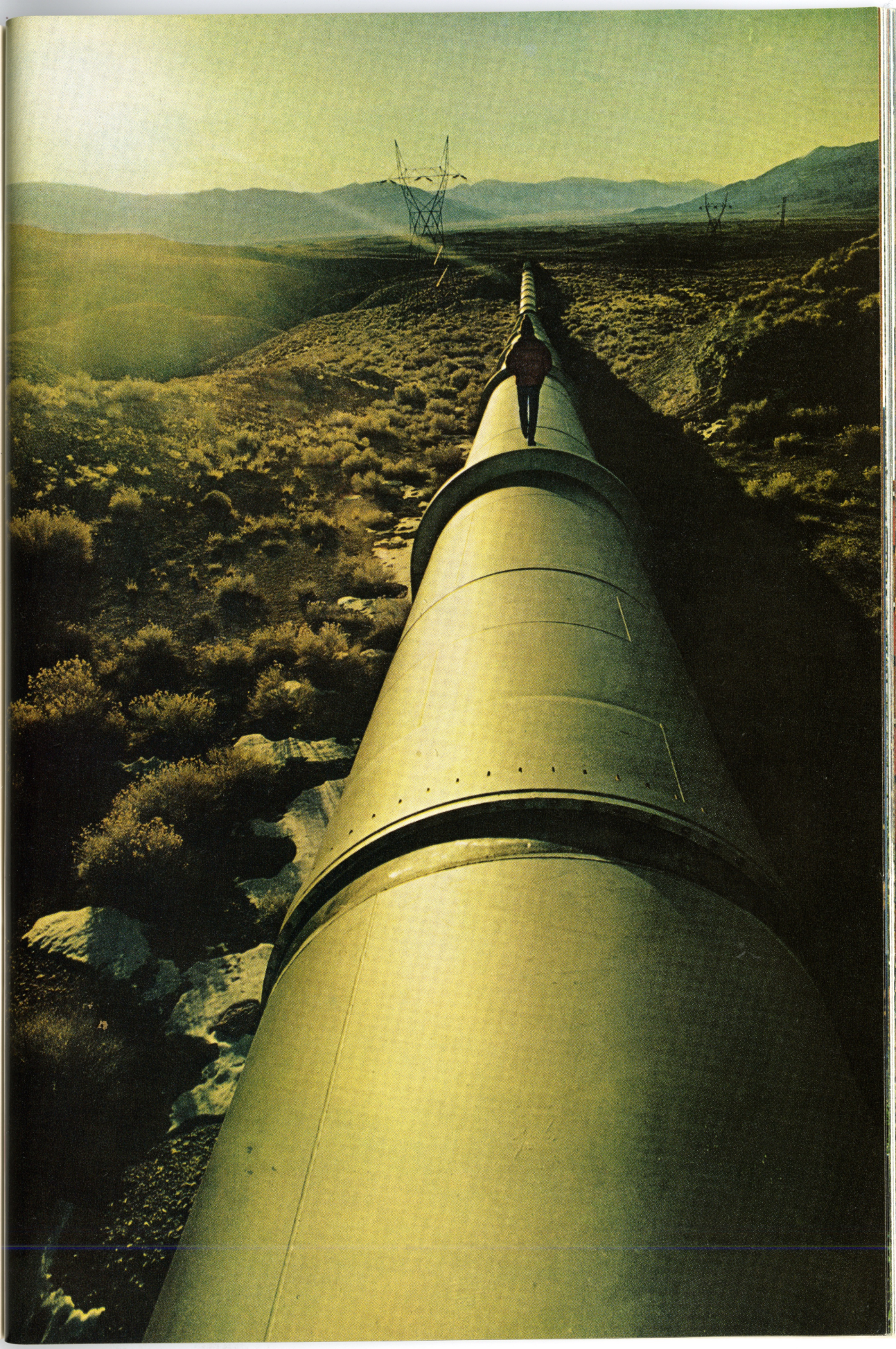
"Give your minds to the Great Spirit," the medicine man said quietly, "and you will breathe."

Indian rituals are less bizarre than the intrigues of the white man in Owens Valley, a majestic mountain corridor on the sparsely settled, almost forgotten eastern side of California. For more than eighty miles parallel ranges wall the valley. On the west is the stern and jagged escarpment of the Sierra Nevada. To the east are the arid White and Inyo Mountains, crowned with bristlecone pines, most ancient

By JUDITH and NEIL MORGAN

Photographs by

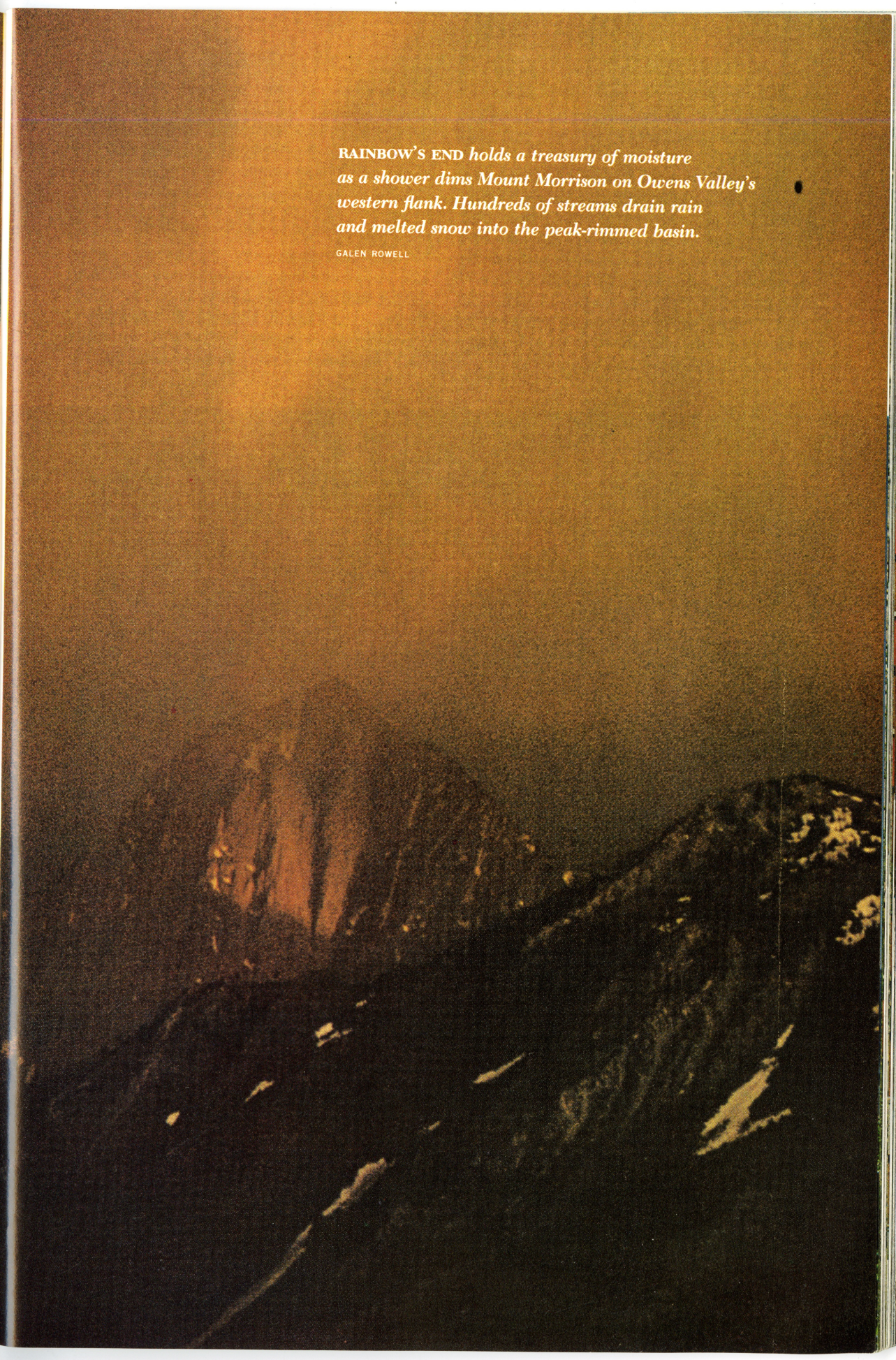
JODI COBB and GALEN ROWELL





*RAINBOW'S END holds a treasury of moisture
as a shower dims Mount Morrison on Owens Valley's
western flank. Hundreds of streams drain rain
and melted snow into the peak-rimmed basin.*

GALEN ROWELL



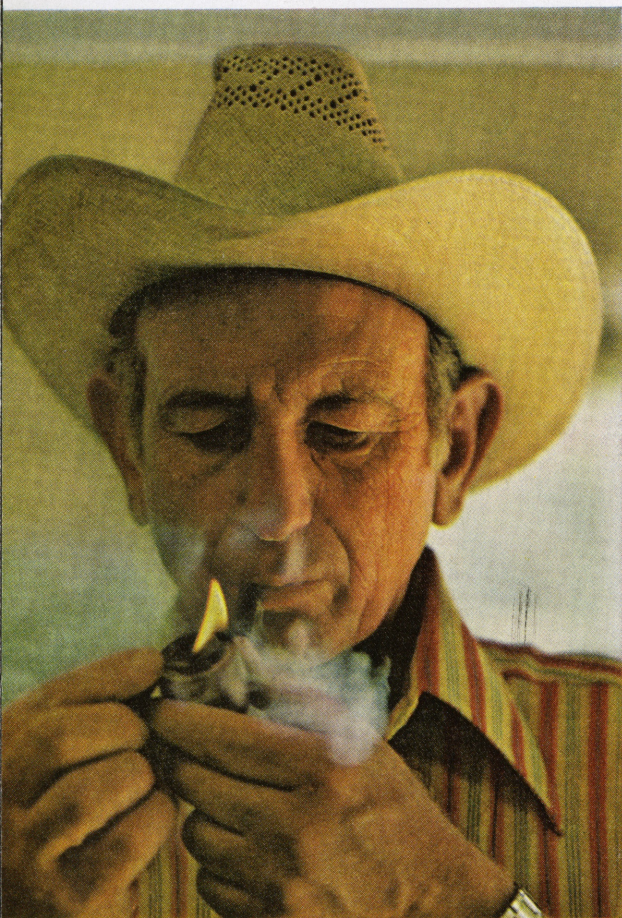
of all living things. At the valley's narrowest it is less than twenty miles across from one crest to another, with 14,000-foot peaks on both sides.

On a fall day we looked down from near Mount Whitney to the valley floor two miles below. Beneath a sky of stained-glass blue, Owens Valley seemed a desert (pages 104-105). Yet it is a bountiful water source—and one of the most disputed on earth. The melted snow that cascades from the Sierra Nevada ends up 130 miles away in Los Angeles, which controls 99 percent of the valley's water, above and below ground.

"We are a colony of Los Angeles," a rancher told us. "Less than 2 percent of our valley belongs to us. We pay rent to the Department of Water and Power, even for our stores and churches. There is more Los Angeles land here than down there in the city."

Metropolis Quenches Its Thirst

Early in this century rapidly expanding Los Angeles was faced with drought. In a daring solution, moving deviously but within the law, city agents bought Owens Valley land and water rights. By 1913 the city had built a 222-mile aqueduct northward across



BOTH BY JODI COBB

Water on wheels: Fred Zack shifts irrigation pipe (right) to soak alfalfa on the family ranch. Quiet, uncluttered vistas drew his father, Milton (above), and uncle, Morris, from city medical practices in 1965 to one of the few valley spreads with its own water. Much of the land once used for produce fields and orchards has reverted to desert. Stock raising has declined as well, but remains an important part of the valley economy.



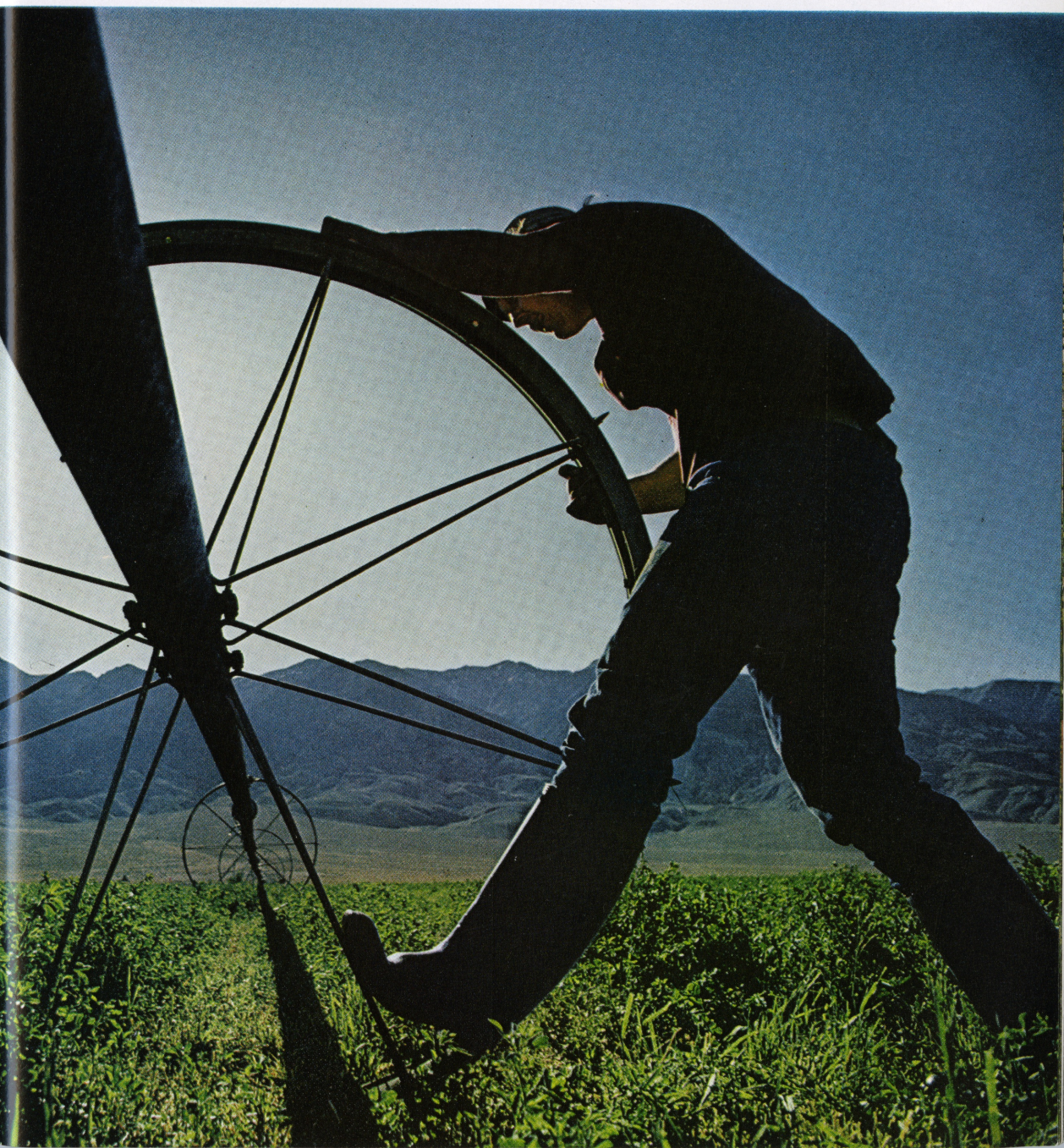
the Mojave Desert to tap the Owens River near Independence (map, following page). Valley ranchers retained the right to divert upstream water for irrigation.

During another drought cycle in the 1920's, the city began buying out valley settlers to extend its rights far northward to the headwaters of the river. Bitterness and suspicion flared. The aqueduct was dynamited. Six months later, ranchers seized and held the aqueduct's control gates for five days.

Bank credit became a critical factor, as bankers outside the valley refused loans to defiant ranchers seeking to maintain their

land. Mark and Wilfred Watterson, brothers who owned the local banks, became virtually the valley's sole creditors and led the fight against the city. But with an unexpected visit of a bank examiner one day in 1927, the Watterson banks collapsed. The brothers were convicted of embezzlement and sent to San Quentin prison.

Ranchers who had sold out to the city and deposited the money with the Wattersons lost their windfalls; the others lost the will to fight on. Soon the city controlled virtually all water rights. Most ranchers sold their land, and many left. Dairies, fields, and orchards withered. 103





Ribbon of life for millions, the Owens River nourishes little but its banks in its own arid valley (**right**). A canal at upper right diverts the flow to the original aqueduct, plus a second conduit added in 1970. Tunneled through mountains, siphoned along deep canyons, the system takes more than half of the valley water for use in Los Angeles. JODI COBB





Magnet of open space attracts more people to Owens Valley each year. Drove of motorcyclists gather at Mammoth Lakes on the rugged western rim for annual races and stunting. Padded for protection, members of the "Old Timers" club rest between spills (below, right).

A backpacking dog named Domino leads a family of mountaineering novices and their Sierra Club instructor through Echo Lake high country. Sensitive to accusations of "water imperialism," Angelenos helped push for a paved highway beside the Sierra that opened the valley to pleasure-seekers.



The scars of the 50-year-old water war are slow to heal. A new battle has broken out, this time in the courts. In litigation between Inyo County and Los Angeles, the valley seeks to limit the city's pumping of underground water to fill a second aqueduct.

"Our people must have *some* control over their destiny," reasons Wilma Muth, an urbane woman who serves as Inyo County supervisor. Yet Los Angeles is the big landlord in the valley, and valley talk turns inevitably to the "City," the "Department," or even, as one bemused official put it, the "Kingdom of Water and Power."

The colonial relationship is schizophrenic. The city's tight but usually benevolent grip has retarded valley growth, leaving its scenic



glories relatively undisturbed. Sagebrush land owned by Los Angeles pushes up to the outer streets of every community. Tourism has become the staple of the valley economy; service stations bring in twice as many dollars as cattle. But this only heightens colonial tensions. The valley provides Los Angeles with 80 percent of its water, and has become its playground as well.

Valley Lives an Outdoor Life

Inyo County, slightly larger than Vermont, encompasses Mount Whitney and Death Valley, the highest and lowest points of the contiguous 48 states. Most of its 17,000 people live in villages strung along Owens Valley from Lone Pine north to Bishop. Life is

shaped by remoteness and by the outdoors.

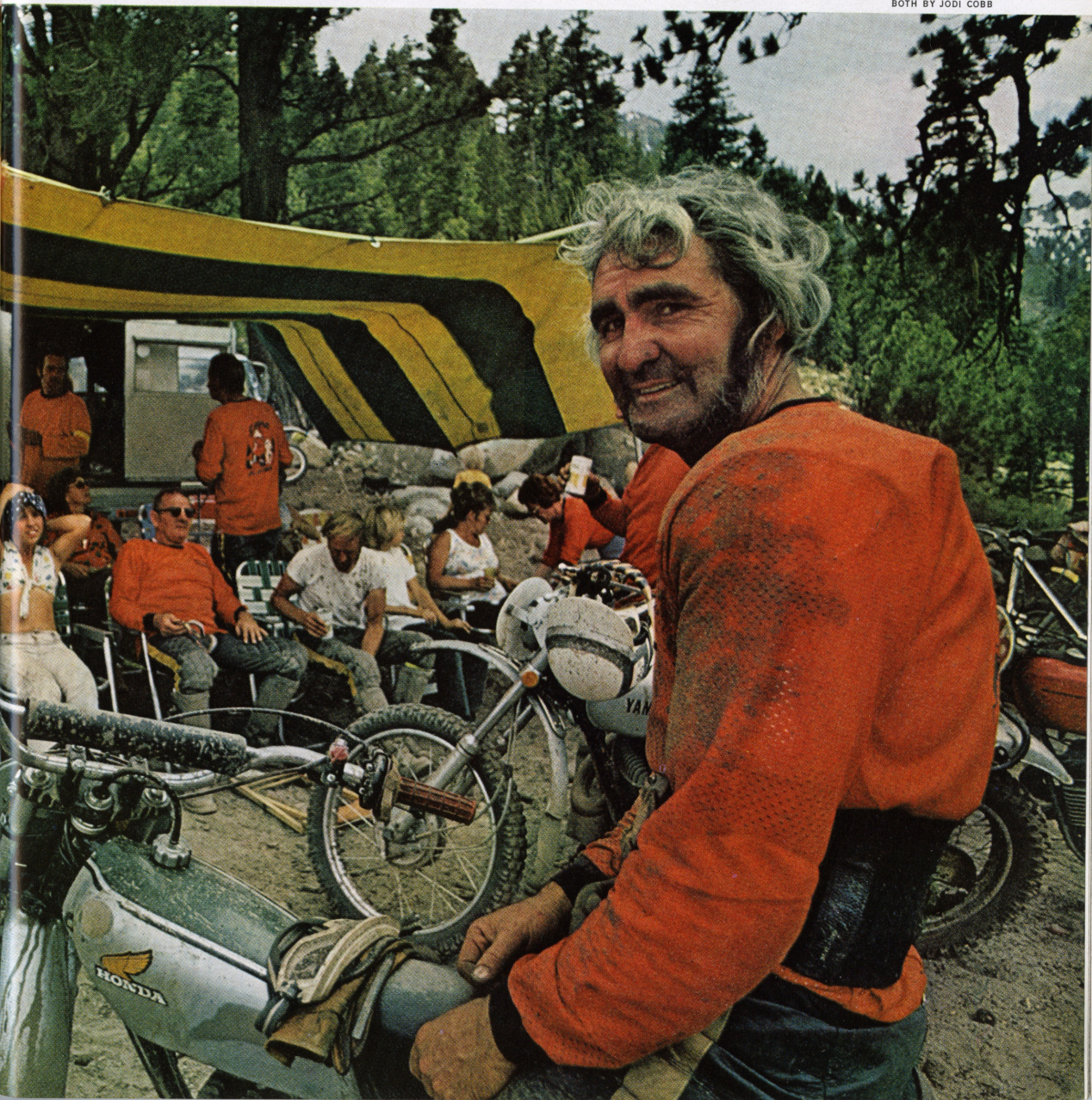
Leisure flows with the seasons, from trout fishing to river rafting, quail and chukar hunting, mountaineering, and skiing. It includes pine nutting, which we learned with Genevieve and J. Emil Morhardt.

A photographer who once traveled with Zane Grey, "Aim" Morhardt paints the valley in water colors, prospects its mountains, and writes much of its music and verse.

The Morhardt nutting method is to spread a sheet beneath a piñon pine and shake the tree with a pole. We settled for a sticky handful of nuts, then went on with a picnic basket and a bottle of wine to a hideaway beside a creek that races off Mount Tom. Aim built a fire of willow branches, while Gen

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BOTH BY JODI COBB







JODI COBB AND GALEN ROWELL (LEFT)

Island of shade spares a hitchhiker from heat waves at Bishop, Owens Valley's largest town. With the loss of water in the 1920's, population waned and a third of the businesses folded. Townsfolk received reparations from Los Angeles, and when the flow of tourist dollars began in the late 1930's, many expatriates returned, swelling Bishop's population to 11,000 today.

Almost as many lived in the valley "town" of Manzanar, one of ten relocation centers established during World War II. A monument and barbed wire (left) mark the internment of some 10,000 Japanese-Americans by their mistrustful government.

created a centerpiece of dried wild iris pods.

We made steak sandwiches with a local specialty: Shepherd Bread, baked from a Basque recipe that requires long fermentation and prolongs freshness. It is a distant runner-up to water and power as the valley's most renowned export.

Aim sprawled beside the creek, radiating the joys of a man born to this setting. "My painting supports my prospecting," he said. "And we're lucky. Beyond that ridge we own half of an old Indian ranch with water. We could grow everything we need."

Gen had driven that week to Reno, 204 miles north, to shop. "It's the nearest place for a lot of things," she said. "Of course, the Sears catalog is the really big store in Bishop."

Valley neighbors team up for weekend trips to the Music Center in Los Angeles, or drive 110 miles to play slot machines and have dinner in Hawthorne, Nevada.

Big Ears Listen to Space

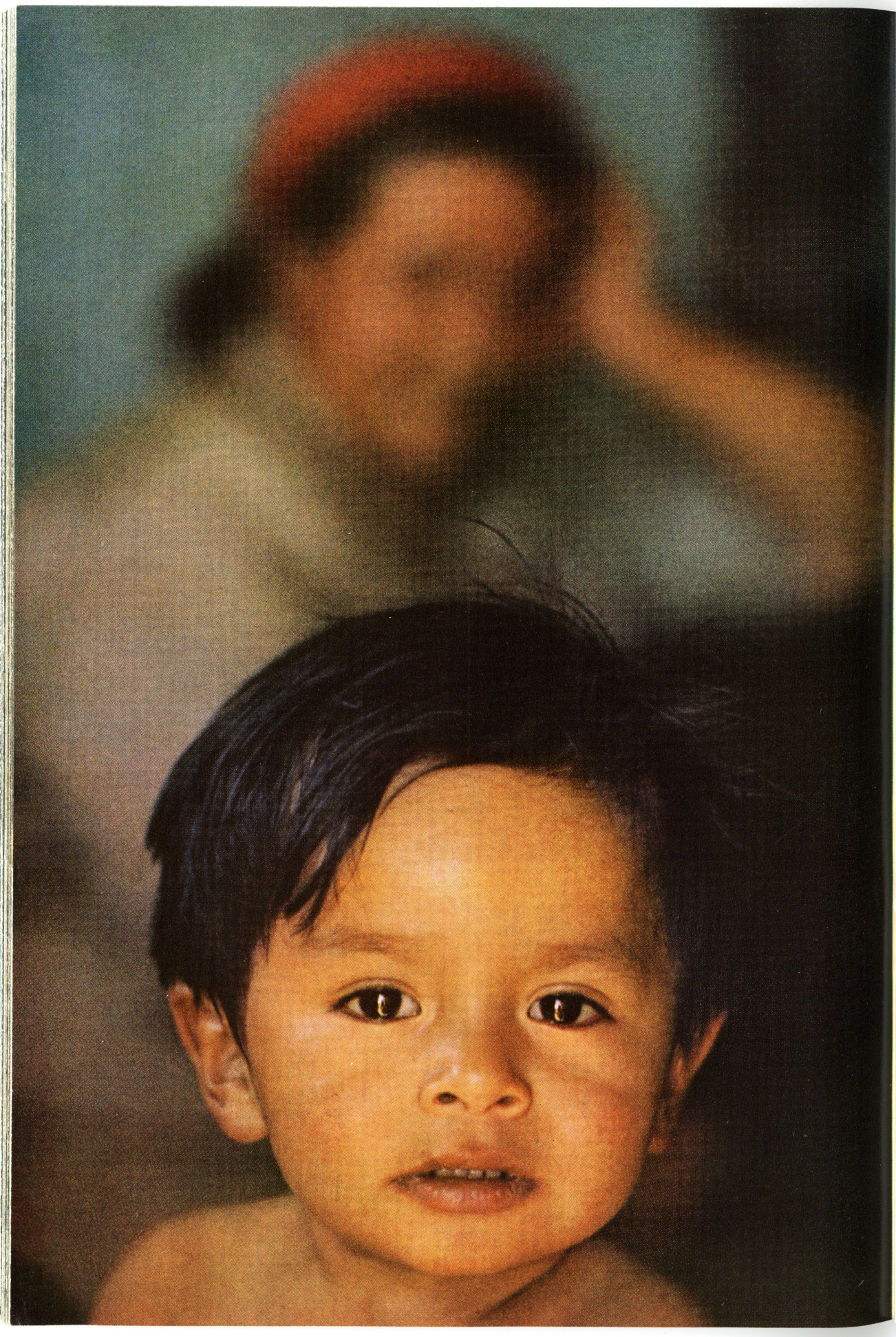
Such distances seem trivial to George A. Seielstad, the radio astronomer who supervises three giant antennas that the California Institute of Technology placed in the valley near Big Pine. As Seielstad showed us around, he discussed the observatory's success in the "chase" for quasars. The antennas search space as distant as 10 billion light-years—almost, says Seielstad, "to the beginning of time." As they scan, these big ears loom above the valley like porcelain plates. They are here because mountain walls shield them from man-made radio signals.

Seielstad settled in the valley in 1964. Ten years later he felt enough of a native to enter politics, and failed by only a small margin to become the first U.S. Congressman from Owens Valley. He shares his neighbors' skepticism of "the Department."

"They have no reservation or hesitation concerning the complete destruction of a scenic resource," he said.

Owens Valley farming has almost disappeared, and ranching has waned. The city allots water for only 11,500 acres of alfalfa land and pasture in the entire valley. Among the few with their own land and water are the Zack brothers, Milton and Morris. They abandoned city medical practices ten years ago in early middle age to ranch 1,300 acres beside Willow Creek, nestling below 14,246-foot White Mountain Peak.

One Sunday at the Zack ranch we watched



sprinklers spray well water across alfalfa fields almost surrounded by sagebrush.

"This land was mostly brush," Milton said. "We put 1,100 acres in alfalfa, and the price went up to \$60 a ton. If baling wire hadn't tripled in price, we could have made good money. We won't ever get rich, but we'll stay."

"Why you?" we wondered.

"This valley chooses its own people. I grew up in Los Angeles, and my wife came from Maryland. We have five children. We all saw this valley and forgot everywhere else."

Residents Fear for Environment

Back in Bishop, where more than half the valley people live, we met another outsider who became an insider. Frank Herbert Fowles III, a Philadelphia-born attorney, came here nine years ago as district attorney.

"That's over now," he said. We sat amid a jumble of files in his new law office. "I'm staying in Owens Valley because this is where I want to live. These are proud people, the best people I've ever known."

Fowles filed the case against the city after Los Angeles had increased its pumping of underground water from six to 150 million gallons on an average day. Inyo County holds that this violates California's Environmental Quality Act, threatening frail plants and wildlife. The Department of Water and Power contends that its obligation, and the greater need, lies with Los Angeles.

"We know all the department guys by their first names," Fowles told us. "They're good guys. Their job is to take our water so Los Angeles can keep growing, and they do it supremely well. Our job is to keep our valley from drying up completely."

On a bright November morning we asked Col. Ray Waski, an Air Force pilot who retired in Bishop, to take us into the air to survey the battleground of this water war. For our guide we invited Russ Rawson, a six-foot-fiver who acts for the department as landlord to hundreds of valley agricultural tenants.

We flew north over dry canyons, and about 50 miles northwest of Bishop we circled the headwaters of the Owens River, 250 miles

from Los Angeles. Then we flew south along the water that finds its way into the highballs of Hollywood stars and the sculptured fountains of Forest Lawn cemetery. In the Owens River Gorge it is a captive current, squeezing through tunnels and tumbling over turbines generating 105,000 kilowatts.

Like an indigo snake on a beige carpet, the river emerges near the head of Owens Valley to move placidly in its own channel for 40 miles. Escorted by willows and cottonwoods, it drifts past Bishop and Big Pine.

Near Independence it is nudged into a straighter, man-made canal and flows past the ghost camp of Manzanar (page 108). Here, 10,000 Japanese-Americans were interned during World War II beneath mountains that made the elders homesick for Fujiyama. It was once the largest, and much the saddest, town in the valley.

The canal leads south by the eroded Alabama Hills, a favorite setting of filmmakers. Close by is a 23-foot-high scarp, a vivid remnant of an 1872 earthquake more intense than the San Francisco quake of 1906. Here beneath Mount Whitney, where hikers and packers sojourn, the river once disappeared into Owens Lake, a natural sump that is almost dry today. Bypassing the lake, the water submits to a series of engineering contortions. Two aqueducts, the second finished in 1970, siphon its flow through the grim Mojave Desert in miles of airtight concrete-and-steel tubes (page 99).

Elevator for Glider Pilots

Turning north again, Ray flew tight circles around the stone shelter atop Mount Whitney and skimmed the Pacific Crest Trail, where almost a dozen peaks tower above 14,000 feet. We studied the sky to no avail for lens-shaped clouds that portend the Sierra Wave, the utopia of glider pilots. A type of lee wave, it begins when wind speeding up the Sierra slope surges at the crest. Such waves have reached as high as 65,000 feet above Owens Valley; the world's soaring record of 46,267 feet was set near here in 1961.

"All of a sudden your altimeter needle is

Eyes bright as hope light the face of Little Hummingbird, descendant of Owens Valley's first residents. Paiute Indians skirmished fiercely with white settlers in the early 1860's, but were exiled to a reservation in 1863. Working to reestablish a sense of pride, the Bishop Indian Education Center has raised tribal employment and cut the school dropout rate from 40 to 3 percent.

JODI COBB

rotating wildly," Waski said. "It's like somebody has grabbed you and is hoisting you straight up. The primary sensation is extreme smoothness. The danger is being lifted so high you run short of oxygen."

Leaving the elusive Sierra Wave to heartier souls, we landed at Bishop and drove to the water department's valley office at Independence, Inyo County seat and a charming village of 1,000 where many of the 260 department employees make their homes. They take a lot of good-natured kidding from neighbors, we heard, who claim that Los Angeles pipes out water in one barrel and ships back smog in the other.

At headquarters we talked to James F. Wickser, Northern District Engineer for the aqueduct. "In the past 40 years we've sold off only about a hundred acres," Wickser said. "Most valley people would rather look out over pasturelands than condominiums. Newcomers who charge us with 'rape, pillage, and burn' try my patience. It's more difficult to challenge the memory and the biases of those who lived through the trouble."

Bitter Memories Still Haunt

There still are a few who were in the valley in those turbulent days when Los Angeles first arrived. On an autumn Sunday when the creeks meandering out of the Sierra were serpentine of golden aspen and water birch, we drove to the village of Big Pine to see Enid Larson in her cottage on Flower Alley.

"I have to go chipmunking soon," she warned us at the door. For 20 years she has studied the Merriam's chipmunk in nearby wilds. Her white hair cropped, she stood small but formidable. We got to the point.

"By 1905 the die was cast," she said. "The city was buying water rights. The ranchers who irrigated joined in a group called Associated Ditches. My father was secretary. They sought a compromise so there could be a dam to provide water both for the ranchers and for the people in Los Angeles. But the valley couldn't agree. So the city said, 'Very well, we won't build a dam. We'll buy out the ranches and take the water, take it all.'"

Tears welled in her eyes. She pressed her forearm against her lips.

"What did your father do?"

"He knew what was coming. I was only 18. I pleaded with him to stay and fight. But he sold out and left. It broke his heart. It killed him."

She turned away and fought to calm her

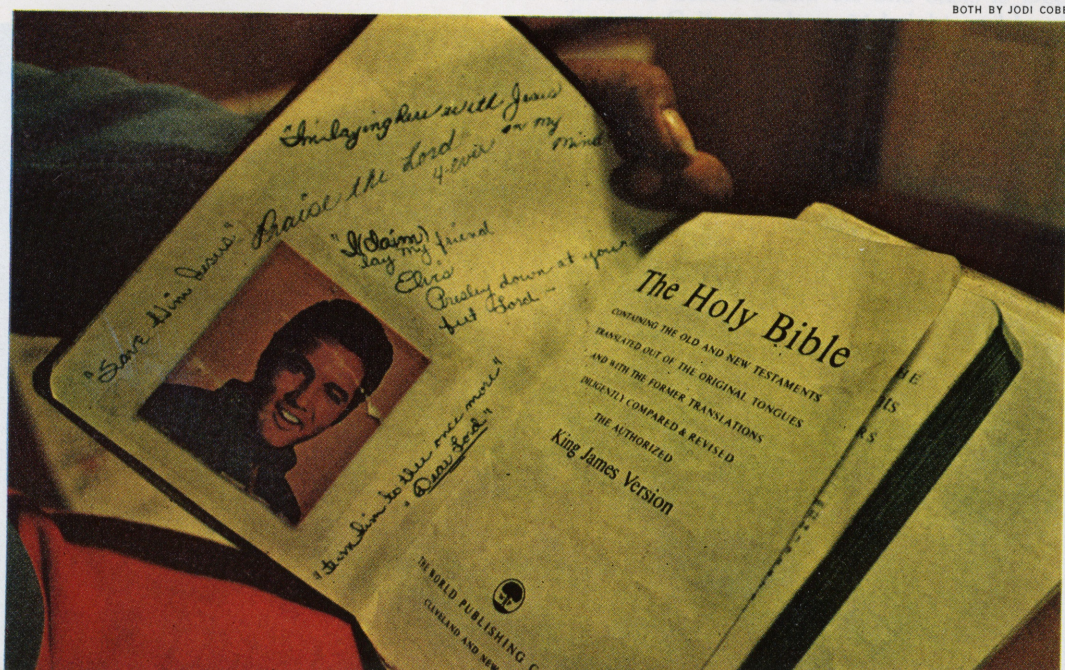


Intent on salvation, a sparse congregation attends the Foursquare Indian Mission, as a youngster's interest drifts to paper aerodynamics. One Bible reveals a concern for the spiritual welfare of Elvis Presley (right). Paiute traditionalists seek to preserve their own religion, based upon reverence for nature and sanctity of the land.

One faction of the tribe hotly disputes an Indian Claims Commission award of 20 million dollars for loss of their land, saying they never relinquished rights to it. But some had already sold their land to Los Angeles, and others, even among the traditionalists, have filed for the per capita payments.



BOTH BY JODI COBB







BOTH BY JODI COBB



An informality nearly obsolete in large cities endures in small towns like Lone Pine, where hotel manager Mary Elizabeth Ward (above) interrupts midmorning chores to commune with a feline guest. Businesses now court customers from Los Angeles; in the bitter twenties, Angelenos visited here at their own risk.

Informality also reigns at a Deep Springs College class (left). The 24 enrollees, who rank academically among the top one-half percent in the nation, raise their own food on the remote campus that doubles as a ranch.

voice. "He brought the land up from sagebrush to support six of us. It was grub hoe and shovel that cleared the ranch, and Father dug every ditch by hand. We grew fruit and alfalfa and cattle and shipped out butter. I was in college at Berkeley in 1925 when Father sold. I stayed away and taught school and didn't come back for 33 years."

"Why did you come back?"

"For me the world begins and ends at the crest of the Sierra and there's only one side, this side. Here is home. Now, go sit over there."

We moved to a couch facing a glass wall. Enid Larson opened the drapes, and an alpine panorama filled the room.

"Over there," she began, like a teacher at her blackboard, "the one with a V in it, that's Split Mountain, more than 14,000 feet high. In front is my beloved Mount Tinemaha. Then Middle Palisade, one of the southernmost glaciers in North America."

She swept the drapes shut and said with intensity, "For two years after I came back, I couldn't pass our old ranch without crying. Now we fight the same old problem. The city built its damnable second aqueduct, and it's pumping underground water to fill it. They've dried every spring in the valley floor. They're destroying vegetation. There are rare species in this valley. Instead of fighting for a ranch, we're now fighting for the survival of plant and animal communities."

Cattle Mixed With College Classes

One of those rare species is a small black toad found in the marshes around Deep Springs Lake, an alkali smudge in a mountain-rimmed desert basin. Its one oasis is Deep Springs College, where 24 bright and hardy young men divide their time between liberal arts studies and running a cattle ranch (left).

The lonely road to Deep Springs over Westgard Pass writhes in a hundred dips, an asphalt whip flailing at desert peaks. It is a route where the mail carrier remains a frontier hero as he rides his 300-mile circuit through two states. At the pass we saw no trace of life between us and the cottonwoods that marked the campus ten miles away.

Dr. Randall Reid, then head of the college, greeted us in Levis. We sat in rocking chairs in their stone bungalow as his wife, Earline, poured coffee and he told how Lucien Nunn, a Colorado power baron, had endowed the school in 1917. The site was chosen for its isolation. Then Dr. Reid told us why he had

left a tenured faculty post at the University of Chicago to head a remote two-year college.

"The contrast is like that between critic and actor," he said. "You can't deal with life by expressing an opinion. Students here must accept responsibility for our community."

We soon saw what he meant. At the dairy barn Juan Ramon Resina, from Barcelona, Spain, was milking one of seven Holsteins. Six other students, raw from the cold desert wind, clattered up in an open truck after half a day of fence building. In the chicken barn the mood was funereal; a phone call had brought a poultry inspector's diagnosis that meant destruction of 200 diseased chickens.

"We have 200 cattle and three cuttings of alfalfa each year," Dr. Reid told us. "With prices the way they are, I'm trying to find a way to feed the cattle to the alfalfa."

He laughed when we asked about the black toad. "It's about an inch long. The students made it their mascot. We don't know which species is more endangered. Toads outnumber students four to one; lately the toads seem to get more funding."

Paiute Customs Make a Comeback

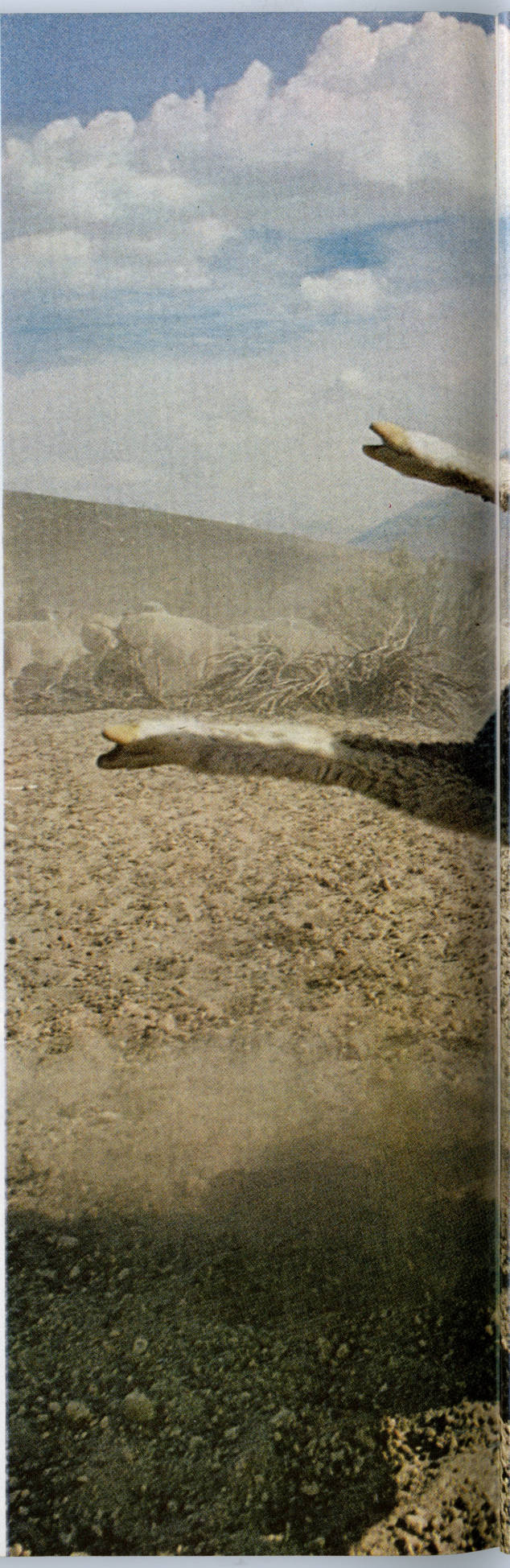
In the college library is a pipestone carving by Raymond Stone, a Paiute Indian from the Big Pine reservation who has lectured at Deep Springs. We visited him at his home. Regarded by many Paiutes as their spokesman, Stone works as a school janitor. At our urging he brought out his carvings of Indian figures, animals, and birds.

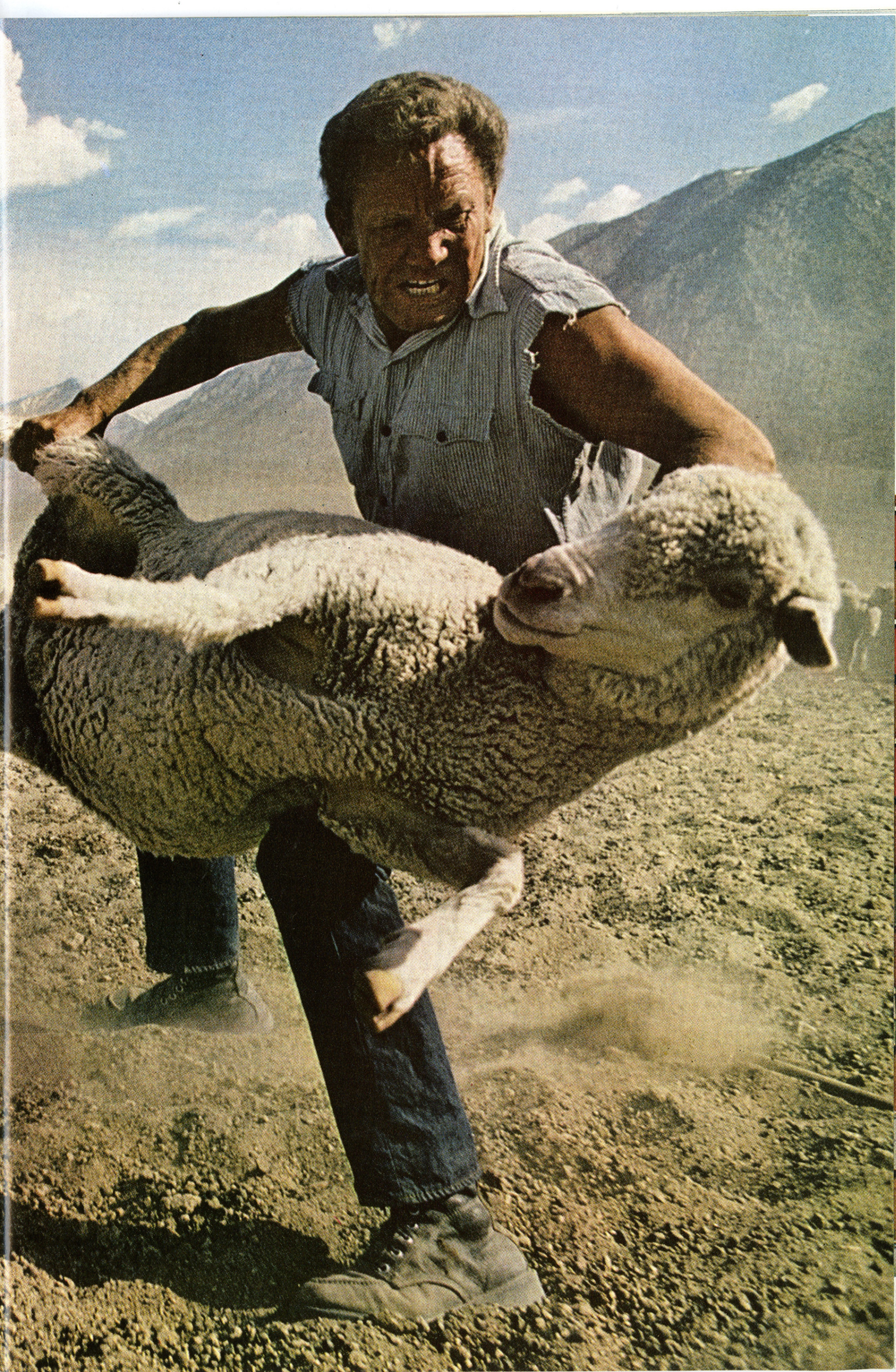
"My father's grandfather was the last real Paiute chief," he said as we admired an eagle. "We lost our Indian ways for a while, but some are coming back." He told us that the songs of the tribe's cry dance, the dance of burial, survive only with two or three older men. But young Indians want to learn.

Earl Lent, a typographer at a Bishop publishing house, has been a tribal official for more than 15 years. He took us to meet other Paiutes, and there was much talk of a powerful medicine man due soon in the valley on his circuit. He had *(Continued on page 120)*

Sheep wrestler Oral Bryant throws one of his flock to check its teeth. Dental wear would mark it for slaughter, before weight loss begins. Ranchers argue that increased pumping of ground water by Los Angeles threatens the valley's already dry pastures.

JODI COBB

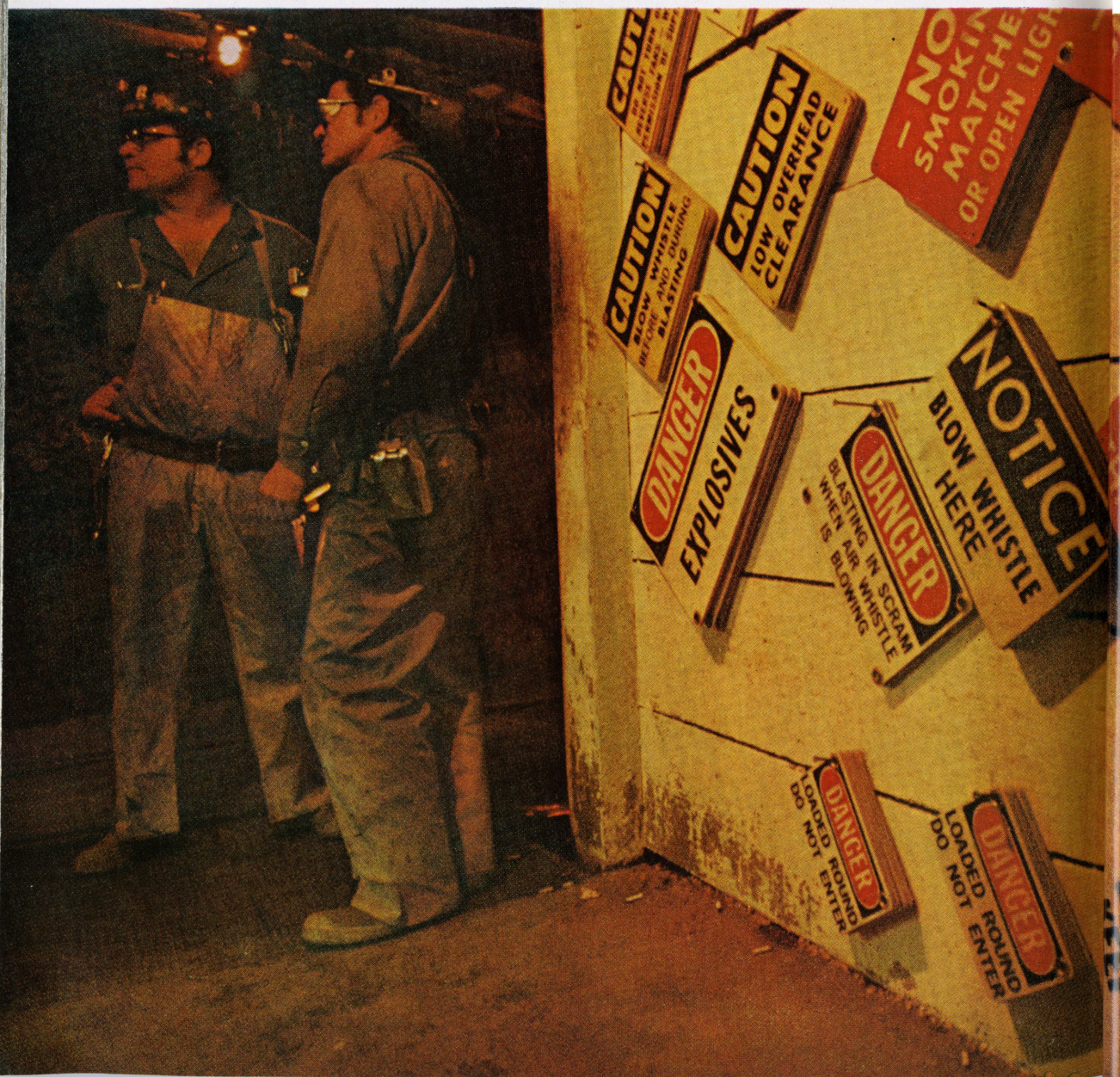


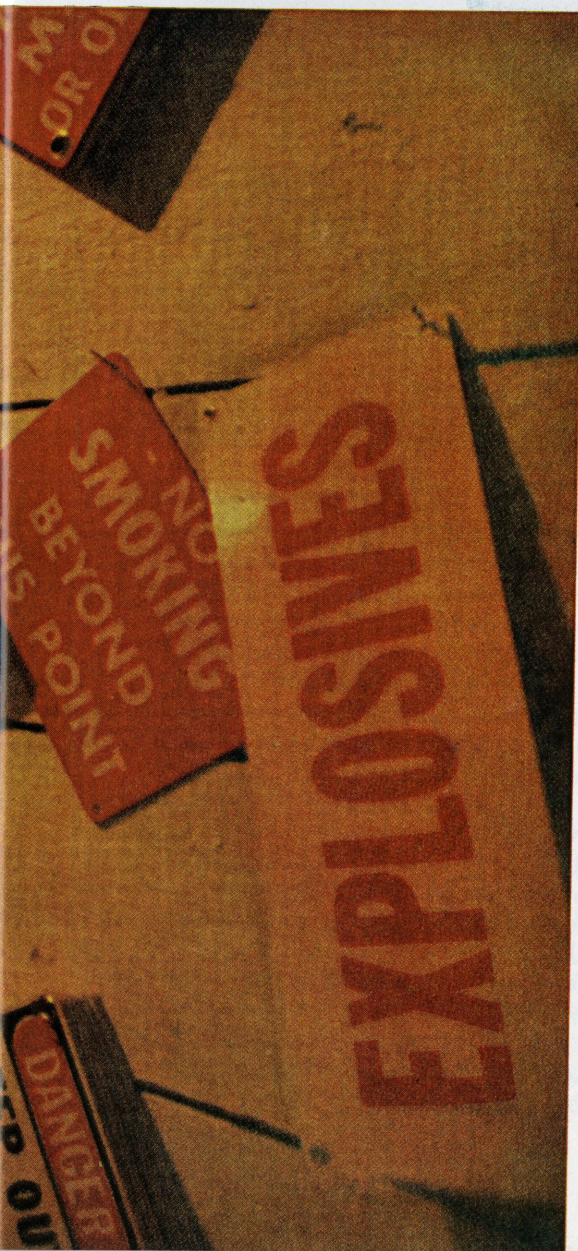
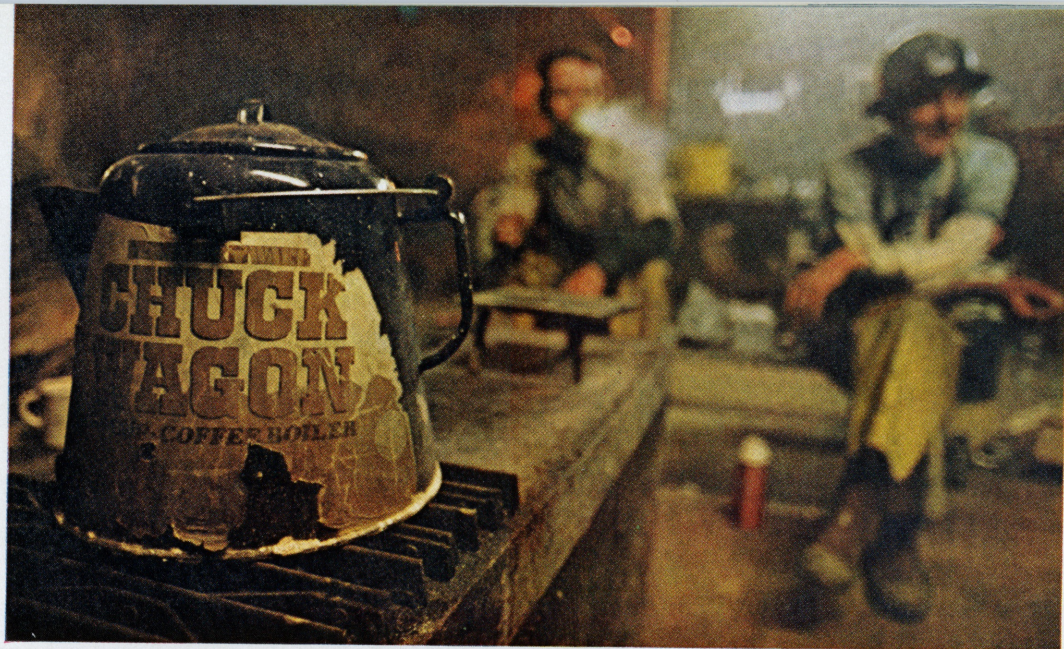


Wealth from a mountain's attic provides more than half the nation's tungsten, plus a major source of income for Owens Valley. Their grim warnings at rest, spare signs dangle from a wall (**below**) at Union Carbide's Pine Creek Mine west of Bishop. Here miners go up, not down. Most deposits in this most productive of U.S. tungsten mines lie above the 8,100-foot entrance level. Operations during the tungsten boom of the 1950's tapped some veins at 13,000 feet. The lunch room, or "dog house" (**right**),

may lie an hour's ride by narrow-gauge railway and elevator from the entrance. Upon leaving, each miner hangs his tag on a board (**below, right**) to ensure that no one has been left behind.

An earlier mining success, the Cerro Gordo—Fat Mountain—mines east of Owens Lake turned out some \$18,000,000 in silver and lead between 1868 and 1877. A small steamer hauled ingots across the lake, a salt sea before the later export of river water left it a cracked, dusty lake bed.





JODI COBB (TOP AND LEFT) AND GALEN ROWELL



been invited by the local healer, who would help prepare for the religious ceremonies.

"The medicine man comes to your house at night," Lent explained. "Everything must be dark. You sit very still as he talks and sings. He is the interpreter for the spirits, and you can sense their presence all around you. The ceremonies have worked. Our people have been healed."

Old-timer Holds No Grudges

Back in 1866, when the last Paiute incident flared in the valley, a cattleman named Thomas Edwards laid out Independence as a town six blocks square. He named streets for Washington, Grant, Webster, Jackson, Clay, and Crockett. Then he named the main street for himself. There on Edwards Street, in his elm-shaded cottage, we found Arlie A. Brierly, 91, who was born in the valley on his parents' ranch and served Inyo County as surveyor,

undersheriff, assessor, and superintendent of schools. Now he runs 800 cattle on 15,000 acres of scrubland leased from Los Angeles without water rights. We interrupted him as he read his new *Scientific American*.

"No matter," he said. "Come sit."

Wide suspenders supported snappy plaid trousers. He leaned on a gnarled sapling, and he looked like Dwight Eisenhower. He was not mad at anybody.

"My mother was the first woman to homestead in Inyo County," he said. "The city paid a fair price for our ranch, as it did for all the others. Course it didn't help when our banks went broke. That put an end to the scrap with the city. My mother was a character witness for the Wattersons, but the jury sent them to San Quentin anyhow."

"Their sister, Mary Gorman, is the only Watterson left. She comes into town sometimes, but we don't bring up the past. It's a wonder

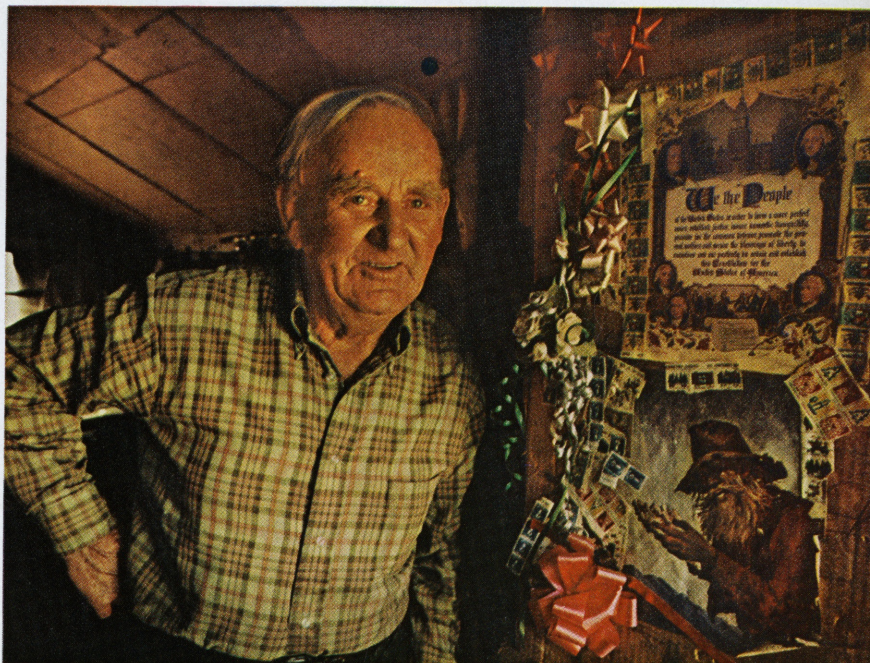


Water-war veteran Mrs. Mary Gorman, whose banker brothers, Mark and Wilfred Watterson, led the unsuccessful struggle against loss of the Owens River water in the 1920's, prunes ivy fringing her home near Independence (left).

The city acquired its water legally, but resentments still seethe over its methods. In whirlwind

land purchases, Los Angeles agents sometimes spread false rumors of mass sales to convince valley ranchers to pull out.

A post-feud newcomer, 75-year-old George Totland (below) settled in the town of Lee Vining in 1933. The lifetime bachelor and gold-miner hopes to marry, he says, when he can save enough money.



BOTH BY JODI COBB

somebody wasn't killed in all that racket."

Arlie Brierly squinted and looked toward the highway. It was Sunday afternoon, and the cavalcade of skiers had begun, from Mammoth Mountain back to Los Angeles.

"One thing I know," he said without rancor. "There's too many people in California. Too many people wanting too many things. Sure are a lot of them drive past my door."

Skiers Crowd Mammoth Slopes

After the first big snow last winter, we followed that ski traffic to Mammoth. At the foot of the slopes we found Dave McCoy, a square-jawed man with curly silver hair. He has built his life around this pumice mountain since 1936, when he surveyed snow-fall for the department. Lifts and runs he has laid out on U. S. Forest Service land serve as many as 18,000 skiers in a weekend (page 126), and have made him wealthy.

We asked him to show us his mountain, and he whisked us in a gondola over a sea of skiers to the summit at 11,053 feet. Nearby, we watched as his avalanche patrol skied off and began setting dynamite charges.

We looked along the jagged teeth of the Sierra. The Pacific Crest Trail led down through conifers to the south. To the northwest were the stiletto spires of the Minarets. The sleek array of basaltic columns called Devils Postpile lay below us to the west.

"Mammoth stands by itself between these two low passes," McCoy said. "When a funnel of air tries to force its way past, it dumps blizzards of snow right here."

The shadow of Mammoth is both real and symbolic. In 1972 the California Supreme Court issued its landmark Friends of Mammoth ruling. It stopped a rising wall of condominiums and established for the first time in the United States that citizens may halt



Gnarled monument to longevity, a bristlecone pine raises twisted limbs before a full moon in early morning. Earth's oldest living things seem to thrive on adversity in the White Mountains. Senior specimens, including one dated at more than 4,600 years old, live above 10,000 feet in dry, rocky soil.



Spiny fruit of the bristlecone pine gives the tree both its name and its progeny; branches contain both male and female cones for pollination of seeds before they drop to the ground.

Oz-like towers of tufa line the shores of Mono Lake, alkaline receptacle for mountain streams north of Owens Valley (**above, right**). The lake level has dropped some 30 feet since Los Angeles extended the aqueduct to Mono's watershed in 1940. Environmentalists rage over depletion of the geologic oddity, lifeless but for brine shrimp eaten by a tumult of sea gulls (**right**).





GALEN ROWELL (FAR LEFT AND BOTTOM); JAY JENSEN (LEFT); AND JODI COBB

private construction that has not received a proper environmental impact study.

The case was supported by a group of distant urban residents who feel ties with Owens Valley. We met some of them one afternoon at a mountain cabin below Wheeler Crest. They call themselves the Eastern Sierra Nevada Task Force of the Sierra Club. A number of local residents have joined as well.

Sprawled on a knoll at 7,000 feet, we looked down at volcanic tableland and the great rift of Owens Valley. Bishop was a stamp-size grid. At midafternoon, when 20-mile-long Sierra shadows tinted the valley floor pink, we moved inside to the warmth of a fire. Mike Weege, an airline employee from

San Diego, presided from a tree-stump stool.

"We recognize that Los Angeles is probably the savior of the valley," Weege told us. "Our goal is to preserve the valley as it is now."

The Sierra Club is concerned about wilderness status for remote bristlecone pine areas of the Inyo National Forest because such designation might bring more visitors to those fragile sanctuaries.

A narrow Forest Service road leads to the 10,000-foot level and the Schulman Grove. On a November morning we went there in a four-wheel-drive vehicle to hike over untracked snow along the Methuselah Trail. Among these 4,000-year-old relics (opposite) we felt we were mingling with the writhing



BOTH BY JODI COBB

The thirst for profit and pleasure triggers a variety of uses for Owens Valley water. In the Alabama Hills near Lone Pine, a makeshift shower douses a model during filming of a shampoo commercial (above). An inner tube voyager cavorts on Bishop Creek, an Owens River tributary (right). At larger dams, cascading waters spin turbines for hydroelectric power.

chorus of a Greek tragedy, their sleek amber arms stabbing defiantly at the cobalt sky.

When we tried to drive higher to the Patriarch Grove, our route was blocked by three young men from Los Angeles and their van, which seemed hopelessly submerged in a snowdrift. Mustering our equipment and their brawn, they brought us all out to safety.

"You've saved our lives," George Harding of Hollywood told us earnestly.

Then he and a companion unfurled what seemed to be flimsy nylon kites and strapped themselves to them. We had watched the brave hang-glider cult jump from sea cliffs near our home in La Jolla, but what we were about to see was big league. They leaped casually off into Owens Valley, more than a mile lower, and wafted down like bright butterflies. The third member of the trio roared away in the van to retrieve them.

Tungsten Flows From a Mountain

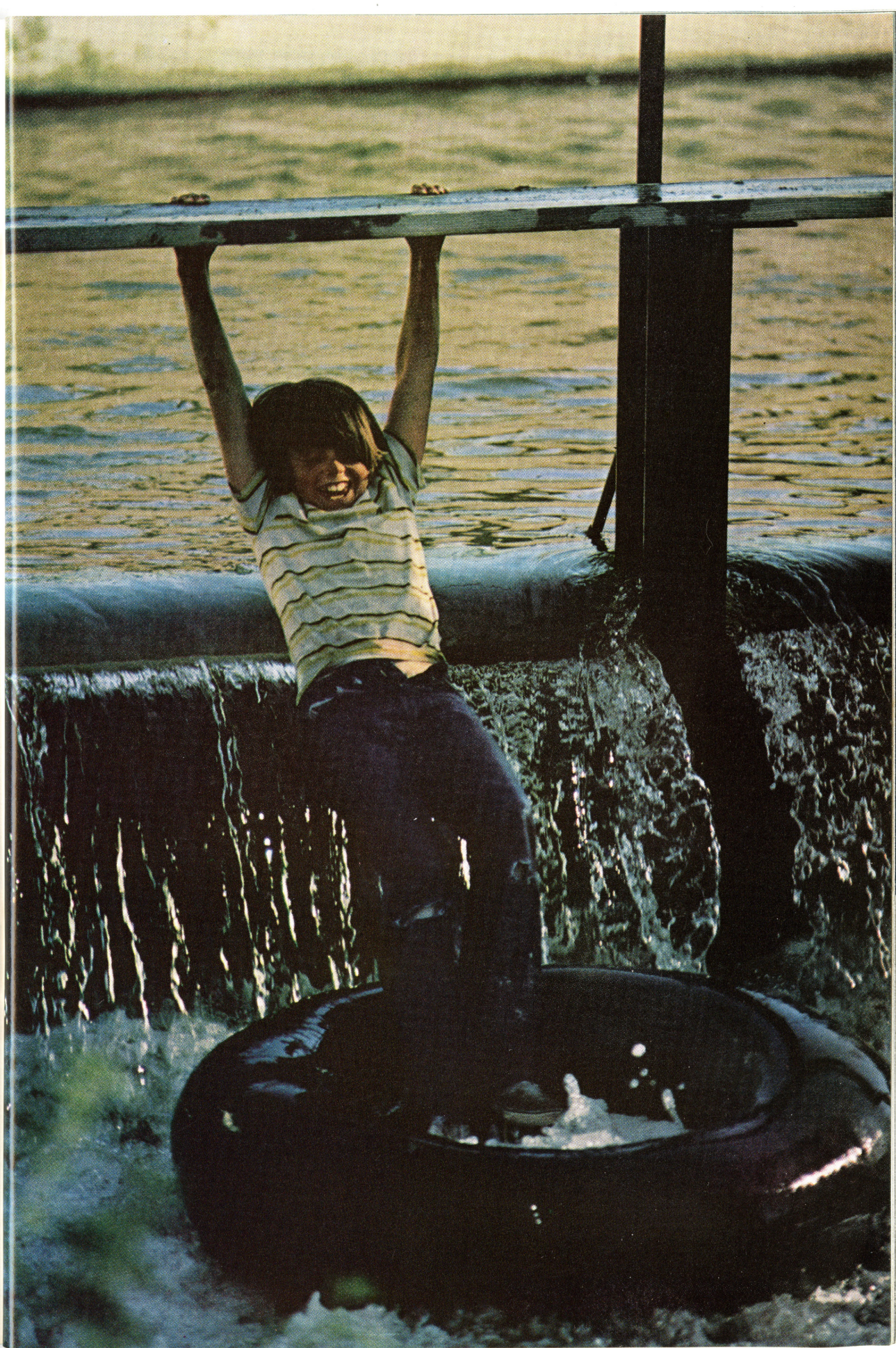
On the opposite side of the valley is a tungsten-rich mountain that provides 400 valley residents with jobs and the United States with more than half of its supply of this strong, hard metal, used in products from ballpoints to rockets. Without this Union Carbide mine, valley people would be even more dependent on what wry villagers call foreign aid from flatlanders. One day we drove 20 miles northwest from Bishop to the 8,000-foot level of Pine Creek Canyon and on one flank saw an ore train emerging from the mountain.

"Maybe it's the first upside-down mine you've seen," said Jim Smith, a mine official. "The miners ride narrow-gauge cars through rock tunnels to the first shaft and then take elevators up to the two-mile level. It can take over an hour to get to work. Most of their big machines have never seen daylight; they were assembled in a diesel shop two and a half miles inside that mountain."

At 4 p.m. we met the train that brought miners blinking into the daylight. Switching off their headlamps, they tumbled out of little rail cars to hang up their brass number tags—the traditional miner's device to guard against being left behind (page 119). They pushed into the dry room and stripped out of damp rubber oversuits and boots.

"Sure, it's tough work," said Tom Charlie, a Shoshone Indian who has worked his way up since 1961 to become an underground foreman. "But that's the only kind I ever had."

In the mill, where raw ore from the mine





is processed, we descended toward a roar like an approaching subway train.

Suddenly we came on a bizarre scene as full of potential terror as any James Bond torture. A grizzled man, spun within a web of ore dust, stood over a jaw crusher, its steel mouth the size of a small car. Chunks of stone, some as large as a boy, moved along a conveyor and dropped into the jaws. They ground inexorably back and forth, reducing boulders to pebbles. Beneath his ghostly cloak of dust the miner wore hard hat, respirator, and ear muffs. Buckled around his belt was a rope ensuring that he could not become his own victim.

Mixed Feelings Toward Los Angeles

Our stay in Owens Valley was at an end. But one strong link was missing. The Waterson brothers, long dead, had been at the vortex of the water war. Their fanatic zeal was legend. At 85, their sister Mary Gorman was aware of much of the conflict that brought ruin to many in the valley.

So we checked out of our motel in Bishop and drove south to Oak Creek, near Independence, and Mary Gorman's lonely white cottage. A tautly elegant woman, Mrs. Gorman led us into a snug library, bright with afternoon sunlight and fragrant with well-read books. "I've lived in this house for 44 years," she said amiably. "My husband is dead. I stay on alone with my cat. I hope my cat will outlive me." She was smiling, her eyes wrinkled into triangles.

"Do you remember the valley as green?"

"I should say it was. Now when I go to the market, it saddens me that everything we have has to be hauled into this rich valley."

"How do you feel now about the city?"

"It's too bad the way they acquired this valley," she said. "They were unscrupulous."

"Your brothers," we said gently. "Were they unjustly convicted?"

"No. They used very, very poor judgment. But the greater guilt was with the city of Los Angeles and those bankers and politicians who wanted the valley to fail." She was quiet

for a long time. "But in a way—one way only—I'm grateful to Los Angeles. The valley I knew is lost, but at least this one is not cluttered with people."

City Prevails in Water War

We remembered Robert Denton, a wise doctor in Bishop, who had told us that for all the wrong reasons, Los Angeles has done many of the right things in Owens Valley. High in a city office, we tried that thought on Duane Georgeson, engineer for the Los Angeles Aqueduct, who sits near the throne of the "Kingdom of Water and Power." Suave and only mildly defensive, he shrugged.

"We've had some good luck in that valley," he said. "Many people recognize the wisdom of our policies, but energy is the real story now. That water flows from Owens Valley by gravity. It takes fuel oil to pump all other water to Southern California. But when we bring in Owens Valley water, we produce electricity equal to two million barrels of oil a year."

"Has Los Angeles treated the valley fairly?"

"Look. The kind of thing that Los Angeles did 50 years ago couldn't have been done without hurting some people. But the 'rape' of Owens Valley never happened. The ranchers were willing to sell."

We asked Georgeson if the city felt pressure in the current court challenge by Inyo County.

"With this emphasis on the environment," he conceded, "there is some short-term threat to our rights. But in the long term there is no alternative."

His point was clear: Los Angeles won the water war long ago. The issues that remain involve the integrity of nature and the dignity of people.

As we turned to leave his office, Georgeson spoke softly.

"It's a wonderful valley, isn't it?" he said.

We nodded, and drove home to La Jolla. In our trunk was a clump of wild iris from the slopes of Mount Tom. In our hearts there was more. □

Dash of hurtling color, a skier descends the steep face of Mammoth Mountain, a lone peak jutting in a huge opening in the Sierra wall. Weather systems funneling through the gap dump snowfalls so heavy that drifts once blocked the ski area's chair lifts. The resort represents a modern partnership between former antagonists: Runoff that once fed the valley now flows to Los Angeles, while weekend skiers from the city return a flow of cash to the source of their water.